

ABSTRACT OF THE INVENTION

DEPTH MEASUREMENT AND DEPTH CONTROL OR AUTOMATIC DEPTH CONTROL FOR A HOLLOW TO BE PRODUCED BY A LASER PROCESSING DEVICE

According to a method for a depth measurement the depths of measuring points on a calibration surface are measured and correction values depending on differences between the measured values and known values are used and stored for a later correction. According to a method for the layer-wise production of a hollow the horizontal boundaries (x_g , y_g) for the removal of a layer (S_{i+1}) depending on the hollow depth (z) were determined from the shape definition of the hollow. The measured values can be continuously stored and used for a later control of the laser processing device.

(Fig. 1)

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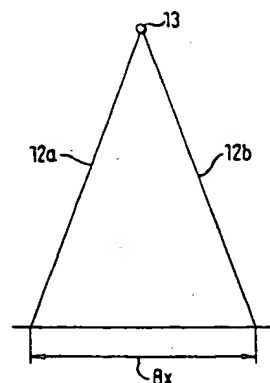
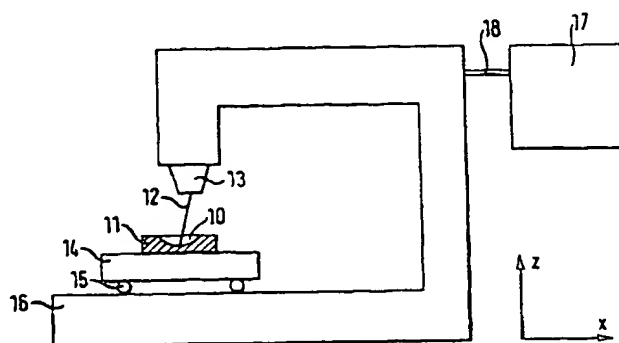
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Mit internationalem Recherchenbericht.

(54) Title: CALIBRATING A DEPTH SENSOR OF A LASER-PROCESSING DEVICE AND PRODUCING A DIE LAYER BY LAYER
USING VARIABLE PROGRAMMING

(54) Bezeichnung: EICHEN EINES TIEFENSSENSORS EINER LASERBEARBEITUNGSVORRICHTUNG UND SCHICHTWEISE
HERSTELLUNG EINES GESENKS MIT VERÄNDERLICHER PROGRAMMIERUNG



(57) Abstract

According to a method for measuring depth, the depths of measuring points are measured on a calibration plate. Correction data are used and stored for subsequent correction according to differences between the measured values and known values. According to a method for producing a die layer by layer, the horizontal limits (x_g , y_g) for removal within a layer (S_{i+1}) are determined in accordance with the depth of the die (z), using the form definition of the die. The measured values can be continually stored and subsequently be used for controlling the laser-processing device.